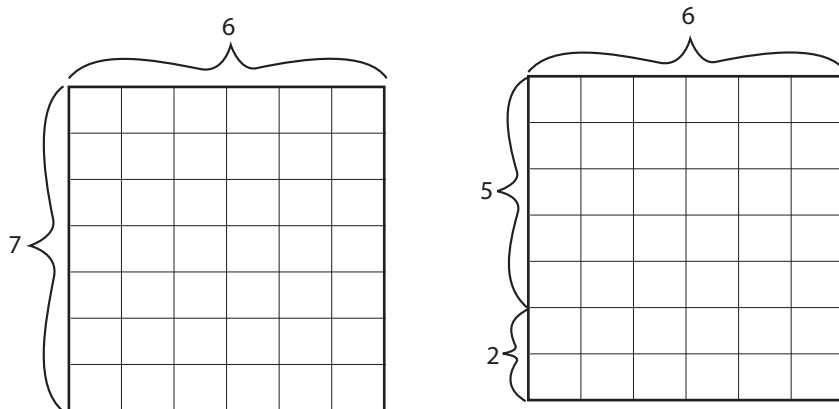## Math Inspection: Rectangles, Arrays, Area, and the Distributive Property

One way to show multiplication is with a **rectangular array**.

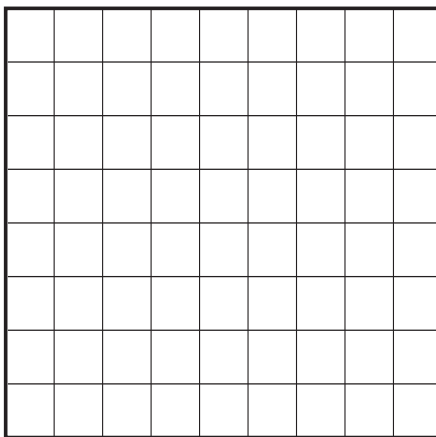1. Look at this example:

   a. Explain in words what you see happening.

   b. Explain in mathematical symbols what is happening.

2. Below is an 8×9 array.
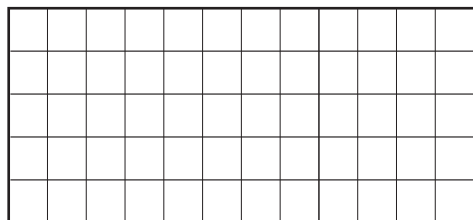
a. Break it up into a new multiplication problem.

b. Explain in words what you see happening.

c. Explain using mathematical symbols what is happening.

3. Below is a 5×12 array.

  a. Break it up into a new multiplication problem.

  b. Explain in words what you see happening.

  c. Explain using mathematical symbols what is happening.

4. Fill in the missing numbers below.

    a. $6 \times 7 = 6 \times 4 + 6 \times$ _____

    b. $9 \times 8 =$ _____ $\times 8 + 4 \times 8$

    c. ___ $\times 7 = 2 \times 7 + 5 \times 7$

    d. $6 \times 7 = 5 \times 7 +$ _____ $\times 7$

    e. $7 \times$ _____ $= 5 \times 6 + 2 \times 6$

    f. $9 \times 9 = 5 \times 9 +$ _____ $\times 9$

    g. $8 \times 7 =$ _____ $\times 7 + 5 \times 7$